

### REMARKS

Applicants amended claims 1, 4, 6-7, and 12-15, cancelled claims 2, 3, and 16, and added new claim 18. Claims 1, 4-15, and 18 are pending.

The Examiner objected to claims 2, 3, and 16 under 37 CFR 1.75(c). These claims were canceled, obviating this issue.

The Examiner objected to claim 4 under 35 USC §112. Claim 4 was amended to obviate this issue. Accordingly applicants request reconsideration and withdrawal of this objection.

The Examiner rejected claims 1, 4-9, and 11-15 under 35 USC §102(b) or 35 USC §103(a) as either anticipated by or unpatentable over Nakatsu, U.S. Pat. No. 6,081,540 ("Nakatsu"). However, Nakatsu does not disclose, teach, or suggest an "n-doped confinement layer [which] comprises a first n-dopant with a sharp doping profile" as required by Applicants' claim 1, as amended. Therefore, Applicants respectfully submit that claim 1 is in patentable condition. Claims 4-9, and 11-15 each depend, directly or indirectly, from claim 1, and are in patentable condition for at least the same reasons. Accordingly, Applicants request reconsideration and withdrawal of the rejection of claims 1, 4-9, and 11-15.

The Examiner rejected claim 7 under USC §103(a) as unpatentable over Nakatsu in view of Ishikawa et. al., U.S. Pat. No. 5,696,389 ("Ishikawa"). Applicants do not concede that the Examiner's proposed combination of Nakatsu and Ishikawa would have been obvious to one skilled in the art at the time of the invention. However, even if proper, the Examiner's proposed combination does not disclose, teach, or suggest an "n-doped confinement layer [which] comprises a first n-dopant with a sharp doping profile" as required by Applicants' claim 1, as amended. Claim 7 depends, indirectly, from claim 1 and is patentable for at least the same reason. Accordingly, Applicants request reconsideration and withdrawal of the rejection of claim 7.

The Examiner rejected claim 8, 9 and 11 under USC §103(a) as unpatentable over Nakatsu in view of Anayama, U.S. Pat. Pub. No. US 2002/0027935 ("Anayama"). Applicants do not concede that the Examiner's proposed combination of Nakatsu and Anayama would have been obvious to one skilled in the art at the time of the invention. However, even if proper, the Examiner's proposed combination does not disclose, teach, or suggest an "n-doped confinement

layer [which] comprises a first n-dopant with a sharp doping profile" as required by Applicants' claim 1, as amended. Claims 8, 9, and 11 depend, directly or indirectly, from claim 1, and are patentable for at least the same reason. Accordingly, Applicants request reconsideration and withdrawal of the rejection these claims.

Applicants thankfully acknowledge the Examiner's indication that claim 10 is in condition for allowance. The Examiner objected to claim 10 as depending from a rejected base claim. In light of the above, Applicants submit that base claim 1 and all intervening claims from which claim 10 depends are in allowable condition. Accordingly, Applicants request the reconsideration and withdrawal of this objection.

Applicants submit that all pending claims are in patentable condition for at least the reasons presented above, and ask that all claims be allowed.


Any circumstance in which Applicants have: (a) addressed certain comments of the Examiner does not mean that Applicants concede other comments of the Examiner; (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims; or (c) amended or canceled a claim does not mean that Applicants concede any of the Examiner's positions with respect to that claim or other claims.

Enclosed is a Petition for One Month Extension of Time. The fees in the amount of \$120 are being paid concurrently on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other required fees to deposit account 06-1050, referencing the attorney docket number shown above.

Respectfully submitted,

Date: \_\_\_\_\_

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